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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,935	01/11/2002	Petri Nykanen	NOKM.018PA	9367
<div>Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425</div>				
			<div>EXAMINER AILES, BENJAMIN A</div>	
			<div>ART UNIT 2142</div>	<div>PAPER NUMBER</div>
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/043,935

Applicant(s)

NYKANEN ET AL.

Examiner

Benjamin A. Ailes

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-20, 24-26 and 29-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-20, 24-26 and 29-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 October 2007 has been entered.

2. Claims 1-4, 6-9, 11-20, 24-26 and 29-46 remain pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6-9, 11-20, 24-26 and 29-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Atwal et al. (US 2003/0061404 A1), hereinafter referred to as Atwal.

5. Regarding claim 1, Atwal discloses a method for selecting a network service within a network having a plurality of network services, including:

providing a plurality of interface modules (Figure 2, client applications 15) each capable of establishing communications with one or more of the plurality of network services (Fig. 2, client applications 15 establish connections with web services 32), wherein the plurality of network services comprise markup-language-based web services (Fig. 2, web services 32);

providing one logical access point (Fig. 2, gateway module 300) to the plurality of interface modules to facilitate a service request from an application (p. 4, para. 0051, gateway intercepts requests from client applications), the service request including one or more service related parameters (p. 4, para. 0052, request includes a method call);

determining, via a markup-language-based web services registry (Figure 5, registry 530), service parameters that describe application interfaces of the plurality of web services (p. 4, para. 0053, repository includes web service identities);

comparing the one or more service related parameters to service parameters associated with the plurality of network services (p. 4, para. 0053, attributes are compared to assist gateway), and in response, automatically selecting the network service whose service parameters provide the greatest compatibility with the one or more service related parameters (p. 4, para. 0053, select matching web service); and

automatically establishing a connection between the application and the selected network service via the logical access point (p. 4, para. 0053 – determine web service and make connection).

6. Regarding claim 2, Atwal discloses the method wherein providing a plurality of interface modules comprises providing a plurality of software objects accessible by

message received from the one logical access point (Fig. 5, web service registry repository 530).

7. Regarding claim 3, Atwal discloses the method further comprising receiving the one or more service related parameters via the one logical access point (Fig. 2, gateway module 300 intercepts requests from client applications).

8. Regarding claim 4, Atwal discloses the method further comprising receiving the one or more service related parameters via an external connection (Figure 2, client applications 15 submit requests).

9. Regarding claim 6, Atwal discloses the method wherein selecting the network service further comprises initiating a business agreement with the network service if the network service is not a member of the business agreement portion of the one or more service related parameters (p. 12, para. 0129 – logging and metering module makes records with respect to usage for billing at a later time).

10. Regarding claim 7, Atwal discloses the method wherein providing a plurality of interface modules comprises providing a plurality of network address translation proxies accessible by messages received from the one logical access point (p. 4, para. 0050, unique ID translation).

11. Regarding claim 8, Atwal discloses the method further comprising receiving the one or more service related parameters via the one logical access point (Fig. 2, gateway module 300 intercepts requests from client applications).

12. Regarding claim 9, Atwal discloses the method further comprising receiving the one or more service related parameters via an external connection (Figure 2, client applications 15 submit requests).

13. Regarding claim 11, Atwal discloses the method wherein selecting the network service further comprises initiating a business agreement with the network service if the network service is not a member of the business agreement portion of the one or more service related parameters (p. 12, para. 0129 – logging and metering module makes records with respect to usage for billing at a later time).

14. Regarding claim 12, Atwal discloses a system for facilitating selection of a network service in response to a service request and associated service request parameters, comprising:

a plurality of service components distributed within at least one network (Fig. 2, web services 32), wherein the plurality of service components comprise markup-language-based web service components (Fig. 2, web services 32); and

an interface module having a plurality of interface objects (Fig. 2, gateway module 300) each capable of establishing communications with one or more of the plurality of service components (Fig. 2, client applications 15 establish connections with web services 32), the interface module including:

a lookup object in communication with a markup-language-based web services registry to establish connection parameters required between the one or more of the plurality of service components and one of the plurality of interface objects (Figure 5, registry 530) to establish connection parameters required

between the one or more of the plurality of service components and one of the plurality of interface objects (Fig. 2, client applications 15 establish connections with web services 32);

a data object in communication with the lookup object to provide parameters identifying attributes associated with the plurality of service components (p. 4, para. 0053, repository includes web service identities), wherein the attributes describe application interfaces of the plurality of service components (p. 4, para. 0053, repository includes web service identities); and

a single logical access point (Fig. 2, gateway module 300) to allow external access to the plurality of interface objects (Fig. 2, client applications 15 establish connections with web services 32 through gateway 300), wherein the network service having attributes that are most compatible with the associated service request parameters is automatically selected by the lookup object (p. 4, para. 0053, select matching web service), wherein the logical access point facilitates automatically establishing a connection between an originator of the service request and the selected network service (p. 4, para. 0053 – determine web service and make connection).

15. Regarding claim 13, Atwal discloses the system wherein the plurality of interface objects includes software objects accessible by messages received from the single logical access point (Fig. 5, web service registry repository 530).

16. Regarding claim 14, Atwal discloses the system wherein the lookup object comprises a matchmaking function to promote business agreements with the network

service in response to the associated service request parameters (p. 6, para. 0068, use client billing information to select).

17. Regarding claim 15, Atwal discloses the system wherein the lookup object comprises a decision function to receive the associated service request parameters and to provide the required connection parameters in response to the associated service request parameters (p. 4, para. 0053, repository includes web service identities).

18. Regarding claim 16, Atwal discloses the system wherein the plurality of interface objects includes a plurality of network address translation proxies accessible by messages received from the single logical access point (p. 4, para. 0050, unique ID translation).

19. Regarding claim 17, Atwal discloses the system wherein the lookup object comprises a matchmaking function to promote business agreements with the network service in response to the associated service request parameters (p. 6, para. 0068, use client billing information to select).

20. Regarding claim 18, Atwal discloses the system wherein the lookup object comprises a decision function to receive the associated service request parameters and to provide the required connection parameters in response to the associated service request parameters (p. 4, para. 0053, repository includes web service identities).

21. Regarding claim 19, Atwal discloses a computer-readable storage medium having computer-executable instructions for selecting a network service from a network having a plurality of network services and associated service attributes that describe

application interfaces of the plurality of web services, the computer-executable instructions performing steps comprising:

providing a plurality of interface modules (Figure 2, client applications 15) each capable of establishing communications with one or more of the plurality of network services (Fig. 2, client applications 15 establish connections with web services 32), wherein the plurality of network services comprise markup-language-based web services (Fig. 2, web services 32), wherein one logical access point (Fig. 2, gateway module 300) to the plurality of interface modules allows external invocation of the network service by an application (p. 4, para. 0051, gateway intercepts requests from client applications);

determining, via a markup-language-based web services registry (Figure 5, registry 530), the attributes associated with the plurality of network services (p. 4, para. 0053, attributes are compared to assist gateway);

receiving network service related parameters with the invocation (p. 4, para. 0052, request includes a method call);

automatically selecting the network service whose associated service attributes most closely match the service related parameters (p. 4, para. 0053, select matching web service); and

automatically establishing a connection between the application and the selected network service (p. 4, para. 0053 – determine web service and make connection).

22. Regarding claim 20, Atwal discloses the computer-readable storage medium wherein the computer-executable instruction step of providing a plurality of interface modules comprises providing a plurality of software objects accessible by messages received from the one logical access point (Fig. 5, web service registry repository 530).

23. Regarding claim 24, Atwal discloses the computer-readable storage medium wherein the computer-executable instruction step of automatically selecting the network service further comprises using the service related parameters to initiate a business agreement with the network service (p. 6, para. 0068, use client billing information to select).

24. Regarding claim 25, Atwal discloses the computer-readable storage medium wherein the computer-executable instruction step of providing a plurality of interface modules comprises providing a plurality of network address translation proxies accessible by messages received from the one logical access point (p. 4, para. 0050, unique ID translation).

25. Regarding claim 26, Atwal discloses the computer-readable storage medium wherein the computer-executable instruction step of receiving service related parameters comprises receiving the service related parameters via the one logical access point (p. 4, para. 0051, gateway intercepts requests from client applications).

26. Regarding claim 29, Atwal discloses the computer-readable storage medium wherein the computer-executable instruction step of selecting the network service further comprises using the service related parameters to initiate a business agreement

with the network service (p. 12, para. 0129 – logging and metering module makes records with respect to usage for billing at a later time).

27. Regarding claim 30, Atwal discloses the method wherein selecting the network service further comprises selecting the network service that is a member of a business agreement portion of the one or more service related parameters (p. 6, para. 0068, use client billing information to select).

28. Regarding claim 31, Atwal discloses the method wherein selecting the network service further comprises using a cost function of the one or more service relate parameters to select the most cost effective network service from the plurality of network services (p. 13, para. 0136, client applications subscribe to web services).

29. Regarding claim 32, Atwal discloses the method wherein selecting the network service further comprises using a cost function of the one or more service related parameters to select a most cost effective network service from the plurality of network services (p. 13, para. 0136, client applications subscribe to web services).

30. Regarding claim 33, Atwal discloses the method further comprising automatically establishing a connection between the application and the selected network service (p. 4, para. 0053 – determine web service and make connection).

31. Regarding claim 34, Atwal disclose the system wherein the lookup object automatically connects the selected network service to the external access via the interface objects (p. 4, para. 0053 – determine web service and make connection).

32. Regarding claim 35, Atwal discloses a method for selecting a service component from a network having a plurality of service components, wherein the plurality of service

components comprise markup-language-based web service components (Fig. 2, client applications 15 establish connections with web services 32), the method comprising:

providing a plurality of interface modules (Figure 2, client applications 15) capable of establishing communications with the plurality of service components (Fig. 2, client applications 15 establish connections with web services 32);

determining, via a markup-language-based web services registry (Figure 5, registry 530), service parameters that describe application interfaces of the plurality of service components (p. 4, para. 0053, repository includes web service identities);

providing one logical access point (Fig. 2, gateway module 300) to the plurality of interface modules to facilitate a service request from an application (p. 4, para. 0051, gateway intercepts requests from client applications), the service request including service parameters (p. 4, para. 0052, request includes a method call) having a business agreement portion that identifies service components having a current business agreement with the application (p. 6, para. 0068, use client billing information to select);

automatically selecting the service component that is included in the business agreement portion of the service request and having a service parameter compatible with one or more service related parameters of the service request (p. 6, para. 0068, use client billing information to select), wherein the service component is automatically connected to the application in response to automatically selecting the service component (p. 4, para. 0053 – determine web service and make connection).

33. Regarding claim 36, Atwal discloses the method wherein the service parameters further include a cost function to facilitate selection of the service component whose

cost is minimized when more than one compatible service component exists in the business agreement portion (p. 13, para. 0136, client applications subscribe to web services).

34. Regarding claim 37, Atwal discloses the method wherein the service parameters further include an application identification to facilitate selection of the service component whose service level is commensurate with the application identification (p. 4, para. 0053, select matching web service).

35. Regarding claim 38, Atwal discloses the method wherein the service parameters further include a service provider identification to facilitate selection of the service component whose service level is commensurate with the application identification (p. 4, para. 0052, matching web service is determined based on client request).

36. Regarding claim 39, Atwal discloses an interface module for facilitating selection of a network service in response to a service request and associated service request parameters, the interface module comprising:

a plurality of interface objects (Figure 2, client applications 15) each capable of establishing communications with one or more of the plurality of service components distributed within a network (Fig. 2, client applications 15 establish connections with web services 32), wherein the plurality of service components comprise markup-language-based web service components (Fig. 2, web services 32);

a lookup object in communication (Fig. 2, gateway module 300) with a markup-language-based web services registry (Figure 5, registry 530) to establish connection parameters required between the one or more of the plurality of service components

and one of the plurality of interface objects (p. 4, para. 0053 – determine web service and make connection);

a data object in communication with the lookup object to provide parameters identifying attributes associated with the plurality of service components (p. 4, para. 0053, repository includes web service identities), wherein the attributes describe application interfaces of the plurality of service components (p. 4, para. 0053, repository includes web service identities); and

a single logical access point (Fig. 2, gateway module 300) to allow external access to the plurality of interface objects (Fig. 2, client applications 15 establish connections with web services 32 through gateway 300), wherein the network service having attributes that are most compatible with the associated service request parameters is automatically selected by the lookup object (p. 4, para. 0053, select matching web service), wherein the logical access point facilitates automatically establishing a connection between an originator of the service request and the selected network service (p. 4, para. 0053 – determine web service and make connection).

37. Regarding claim 40, Atwal discloses the module wherein the plurality of interface objects includes software objects accessible by messages received from the single logical access point (Fig. 5, web service registry repository 530).

38. Regarding claim 41, Atwal discloses the module wherein the lookup object comprises a matchmaking function to promote business agreements with the network service in response to the associated service request parameters (p. 6, para. 0068, use client billing information to select).

39. Regarding claim 42, Atwal discloses the module wherein the lookup object further comprises a decision function to receive the associated service request parameters and to provide the required connection parameters in response to the associated service request parameters (p. 4, para. 0053, repository includes web service identities).

40. Regarding claim 43, Atwal discloses the module wherein the plurality of interface objects includes a plurality of network address translation proxies accessible by messages received from the single logical access point (p. 4, para. 0050, unique ID translation).

41. Regarding claim 44, Atwal discloses the module wherein the lookup object comprises a matchmaking function to promote business agreements with the network service in response to the associated service request parameters (p. 6, para. 0068, use client billing information to select).

42. Regarding claim 45, Atwal discloses the module wherein the lookup object further comprises a decision function to receive the associated service request parameters and to provide the required connection parameters in response to the associated service request parameters (p. 4, para. 0053, repository includes web service identities).

43. Regarding claim 46, Atwal discloses the module wherein the lookup object automatically connects the selected network service to the external access via the interface objects (Fig. 2, client applications 15 establish connections with web services 32 through gateway 300).

Response to Arguments

44. Applicant's arguments, see REMARKS/ARGUMENTS, filed 26, with respect to the rejection(s) of claim(s) 1-4, 7-9, 12, 13, 15, 16, 18-20, 25, 26, 31-34, 39, 40, 43 and 46 under 35 USC 102(e) as being anticipated by Atwal et al. (US 7,080,138) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Atwal et al. (US 2003/0061404 A1).

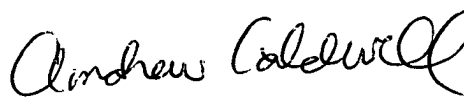
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on Monday-Thursday 6AM-10PM in accordance with IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa


ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER